


**FORMATION OF SILICON OXIDE FILM AND SILICON OXYNITRIDE FILM UNDER LOW PRESSURE****Publication number:** JP2000183055 (A)**Also published as:****Publication date:** 2000-06-30 KR20000039247 (A)**Inventor(s):** CHUNG BYUNG-HONG; RI SEISHU; RI TOKON; JOUNG WOO-IN**Applicant(s):** SAMSUNG ELECTRONICS CO LTD**Classification:**

**- international:** *H01L21/8247; H01L21/31; H01L21/316; H01L21/318; H01L27/115; H01L29/78; H01L29/788; H01L29/792; H01L21/70; H01L21/02; H01L27/115; H01L29/66; (IPC1-7): H01L21/316; H01L21/318; H01L21/8247; H01L27/115; H01L29/78; H01L29/788; H01L29/792*

**- European:****Application number:** JP19990346878 19991206**Priority number(s):** KR19980054522 19981211**Abstract of JP 2000183055 (A)**

**PROBLEM TO BE SOLVED:** To provide a method for forming a low-pressure wet oxide film and a low-pressure oxynitride film, whose characteristics of film quality are satisfactory and reproducibility is superior. **SOLUTION:** In this method for forming a silicon oxide film, a silicon substrate is inserted into a furnace, and while the pressure in the furnace is kept at 760 Torr or lower, O<sub>2</sub> gas is made to react with H<sub>2</sub> gas, and the produced H<sub>2</sub>O gas is injected inside the furnace, making the silicon substrate wet and oxidized. In the method for forming a silicon oxynitride film, silicon substrate is inserted into a furnace, and while the pressure in the furnace is kept at 760 Torr or lower, NO gas or N<sub>2</sub>O gas is injected into the furnace, making the silicon substrate oxynitride.

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